



(11)

EP 1 637 660 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
05.04.2006 Bulletin 2006/14

(51) Int Cl.:
E02F 9/28 (2006.01)

(43) Date of publication A2:
22.03.2006 Bulletin 2006/12

(21) Application number: **05027594.0**

(22) Date of filing: **03.07.2002**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
IE IT LI LU MC NL PT SE SK TR**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **06.07.2001 US 899535**

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
02749631.4 / 1 404 926

(71) Applicant: **ESCO CORPORATION**
Portland
Oregon 97210 (US)

(72) Inventor: **The designation of the inventor has not
yet been filed**

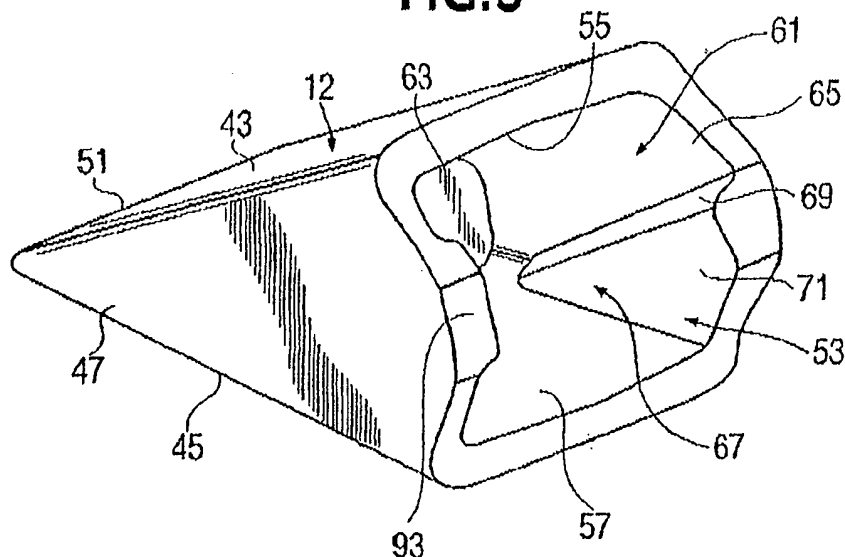
(74) Representative: **Bardehle, Heinz**
Patent- und Rechtsanwälte
Bardehle . Pagenberg . Dost .
Altenburg . Geissler
Galileiplatz 1
81679 München (DE)

(54) Wear member and assembly

(57) A wear member (12) comprising a front end (51), a socket (53) having an open rear end to receive a nose (18) fixed to an excavating machine, the socket being defined by converging surfaces (55,57), side surfaces (59,61), a front surface (63) and the open rear end, and having a longitudinal axis (X), and a lateral surface (69) positioned between the front surface and the open rear

end of the socket that faces in a direction generally toward one of the converging surfaces, whereby the lateral surface being inclined to the longitudinal axis to produce in use a resisting force (B1) having a component that tends to pull the wear member rearward onto the nose for certain loads (P1) applied to the front end of the wear member. Also disclosed is a wear assembly comprising such a wear member, a nose (18) and a lock (16).

FIG.5





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 02 7594

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2 124 230 A (HOSMER CHESTER C ET AL) 19 July 1938 (1938-07-19) * the whole document *	1-5,7-10	E02F9/28
X	US 2 987 838 A (STRATTON ARVIN V) 13 June 1961 (1961-06-13) * column 5, line 52 - column 6, line 10 * * figures 10,11,13 *	1-3,6-10	
A	US 5 992 063 A (MACK ET AL) 30 November 1999 (1999-11-30) * figures 1-5 *	1,7	
D,A	US 4 335 532 A (HAHN ET AL) 22 June 1982 (1982-06-22) * figures 1,2 *	1,7	
			TECHNICAL FIELDS SEARCHED (IPC)
			E02F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		14 February 2006	Sheppard, B
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

2

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 02 7594

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-02-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2124230	A	19-07-1938	NONE	
US 2987838	A	13-06-1961	NONE	
US 5992063	A	30-11-1999	US 5987787 A	23-11-1999
US 4335532	A	22-06-1982	AR 228354 A1	28-02-1983
			AT 379839 B	10-03-1986
			AT 186781 A	15-07-1985
			AU 535414 B2	22-03-1984
			AU 6935381 A	19-11-1981
			BR 8102233 A	12-01-1982
			CA 1172287 A1	07-08-1984
			CH 651608 A5	30-09-1985
			DE 3113342 A1	07-01-1982
			DK 185981 A	29-10-1981
			ES 271590 Y	01-08-1984
			FI 811288 A	29-10-1981
			FR 2481338 A1	30-10-1981
			GB 2074980 A	11-11-1981
			GR 75223 A1	13-07-1984
			IN 155591 A1	16-02-1985
			IT 1170917 B	03-06-1987
			KR 8501279 B1	04-09-1985
			MX 153102 A	04-08-1986
			NL 8101457 A	16-11-1981
			NO 811412 A	29-10-1981
			NZ 196940 A	16-03-1984
			SE 445842 B	21-07-1986
			SE 8102378 A	29-10-1981